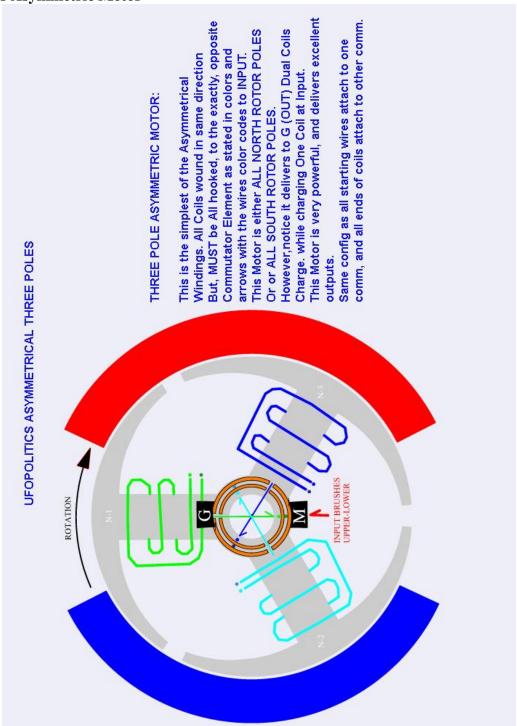
The Three Poles Asymmetric Motor



"The Season of the Witch 2012"...

@Woopy: I will post later on some graphics on how to adjust your little nice motor to start "right away"...it has to be set at proper "Timming" just like we do with the Stinking and Greasy Dirty Gas Engines...by adjusting Distributor Shaft...well, that was for old engines though...now they adjust electronically...

Oh!, I have a great present here for you all to have lots of fun with...Well "presents for some...and kind of "Head Aches" for some Classic Symmetrical Physics "Experts"...

### [IMG] [/IMG]

Now this Three Poles is "applicable" to all multiples of three (3), as Six(6), and Nine(9)...Right John Stone?... ©



I started practicing in a Traxxas R/C Model, Now, there are two Models within same "family"...and they are rated within the "Symmetrical World" as per T (Turns)..like 12T...or 9T...the less the number of "T's", the fastest this motors will run...but also the faster they will burn to crispy, while putting the Batteries and controllers at limits of "Life and Explosion"...but We have Larry's Bunker...so is Ok...

The Model of biggest shaft, so we could work fine...is the *TITAN 12T550*, Now we just need one of those...then get a cheaper one (same body) that we could use to take off parts from...A TRAXXAS STINGER 20T, because this one is shorter of shaft but same Commutators and Body Mounts.

The draw Back in this models is that some "Body Tweak" will have to be done that requires some craftsmanship, and that is the positioning of "Firing Angles" (Brushes Positioning). This Motors DO NOT have them like I have posted on this diagram...but, at 90 degrees plane dividing Stators in half...Not Good...so there is some filing and cutting to allow right brush placing...no big deal though.

@John Stone: Thanks for your words!...And here you have a little package to get those Motors You have showed Us...into the Asymmetrical World...They will be very Happy Motors, I assure You that!

Now if you take a closer look at this Model above...It should not run...right?...well, notice they are Two Poles "supposed" to be North (N2-N3) While N-1 is being fired...Therefore N3 should be attracted towards center of South (Red) Stator...opposing rotation...and N2 is been repelled by North Stator, ALSO "supposed" to "Counter Effect Rotation...??!!

So... it should not turn Right Lamar?...However, it DOES!...and AWESOME!!

Now, why do you think that Happens Lamar?...If "supposedly" this Coils-Inductors "never" change their polarity??!!...

### xactly Tyson...

### Quote:

Originally Posted by **SkyWatcher 2** 

Hi folks, Hi ufopolitics, thanks for sharing the 3 pole setup.

So I assume when you say it should not run well that way, you are referring to the fact that if the N2 or N3 poles did not change magnetic polarity, then they would tend to resist the motor motion.

Though at the speed these armatures are moving, that the coil collapse is aiding the motor rotation and possibly also briefly countering the induced counter emf upon coil energizing, just as you have claimed. Makes sense to me.

I will now wind some new coils on my small 3 pole motor, etc.

peace love light





Hello Tyson,

Yes exactly as I said, and you said now...they DO reverse magnetic polarity, and assist rotation big time...while returning our Input magnified...

Now the turns here would be as much of a decent gauge it will allow...You could "pack them" as you finish Coils, basically at sides to allow for the other Coils to fit, and also the furthest away from core the commutator would be...the more space you would have...packing could be with a plastic (not sharp, but very soft piece, rounded smooth, or could be also a Paint Wood stick...

Well if you look at it...there are two Coils against just one (N-1)...it is not "supposed" to move at all right?

This is "THE REAL" Counter effect, Tyson...the Symmetry produces a "Fake" a False one...is forced to be created through reversal of polarities, killing the real one...That is "The Story Teller" proven here, my friend.

Regards and much peace, love and light for you too my dear friend

The thing with this Asymm motors is that Coils at Motor-Gen can not be facing each others at 180 degrees...or will cancel electrical flow...because of opposed Magnetic Fields...

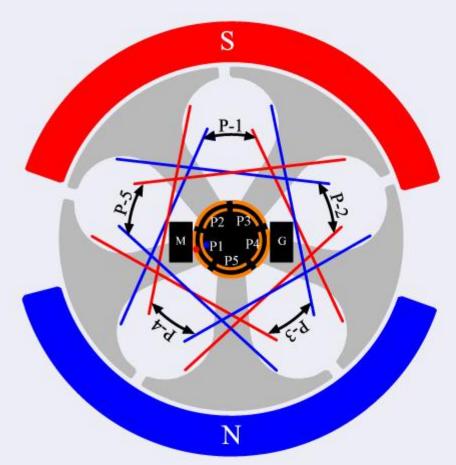
The Secret for this windings (ALL) is the fact that <u>They could NEVER be Opposed to each others as Pairs of Input and Pairs of Output touching both the same Commutator Elements at same time at 180 Degrees.</u> This will cause Two Opposed Magnetic Fields Interlaced will CANCEL to Zero...So Your Outputs will be very LOW.

You just wind it as winding a straight through Coil...no matter what paths over the core you have to follow...Understand me? Meaning that a continuous Wire wound will render at start, let's say an N projected toward Stators, and the other side ITS South projected also outwards...

I think that getting distracted from Cores-Poles Config's get you guys confused, so FOCUS on your wires first, and their direction to follow.

The other thing is to MARK YOUR START WIND PRE-CHOSEN COMMUTATOR. Because once you start turning it, it could be a tendency to confusion...

## ASYMMETRIC FIVE POLE RADIO SHACK MOTOR



P1=Pairs of Coils Start Winding number one (1)

Blue -Red means projecting magnetic fields N/S outwards, towards Stators

All Pairs of Coils wound in same direction of windings, just like winding One Coil.

All Coils must start from same commutator and all end at the other side commutator. Commutators-Elements must be perfectly aligned Upper and Lower.

Wire awg 30 (Red R/S Wire)

M Brush=Motor (Input) G Brush=Generating Side (Output)

[/**I**M**G**]

This is how I understand the windining, correct me when I am wrong:

*The picture is a topview of the rotor with magnets.* 

Attach wire to the upper commutator at P1 and wrap magnetic wire 25 times through holes marked P4 and P1 in the picture, do not cut the wire, and wind 25 times (same direction as previous coil) through holes marked P1 and P3. Do not cut the wire and attach it to lower commutator at the pole exactly opposite to P1. Cut the wire. Total wire resistance should be between 1.2 or 1.6 ohm.

Now start at P2 through holes (25x)P5-P2 attached to holes (25x)P2-P4 attach cable again to lower commutator at the opposing pole to P2 etc.

In total you make five V-shaped (two-pair serial) coils.

Bert

Many Thanks Bert!!

Your description is awesome!!,

I'll add this to Brets:

Winding instructions

Initial Marking Up

The end of the rotor with the longer shaft is called the upper-end. At the upper-end, using a permanent marker, number the upper commutators, 1 through to 5 in a clockwise direction. Now number the lower commutators, noting that they will take the number of the marked commutator vertically inline above.

Referring to fig 1, and looking at the upper-end of the rotor, locate commutator 1, noting that it is adjacent to a bar. Now move clockwise to the next bar, the slot clockwise from the bar, is Slot A. Mark the entrance to Slot A with a permanent marker, as shown – this is a reference point.

### Winding:

At the upper-end attach the wire to commutator 1 tab. Take the wire down through slot A, and bring up through slot D, and take to slot A – this is one turn. Repeat for 24 more times, which will give 25 left windings.

Once the 25 winding are done, the wire should be at the upper-side of slot A. Take the wire down slot A, and bring up through slot C, and take to slot A; repeat 24 more times. After 25 right winding, take wire down slot A and attach wire to lower commutator 1 tab.

### Winding 2

At the upper end, attach wire to upper commutator 2 tab.

Take wire down through Slot B and bring up through slot E, repeating for 25 turns. Then take wire down slot B and bring up through slot D, repeating 25 times. Take wire down slot B and attach wire to lower commutator 2 tab.

### Winding 3

At the upper end, attach wire to upper commutator 3 tab.

Take wire down through Slot C and bring up through slot A, repeating for 25 turns. Then take wire down slot C and bring up through slot E, repeating 25 times. Take wire down slot E and attach wire to lower commutator 3 tab.

### Winding 4

At the upper end, attach wire to upper commutator 4 tab.

Take wire down through Slot D and bring up through slot B, repeating for 25 turns. Then take wire down slot D and bring up through slot A, repeating 25 times. Take wire down slot D and attach wire to lower commutator 4 tab.

### Winding 5

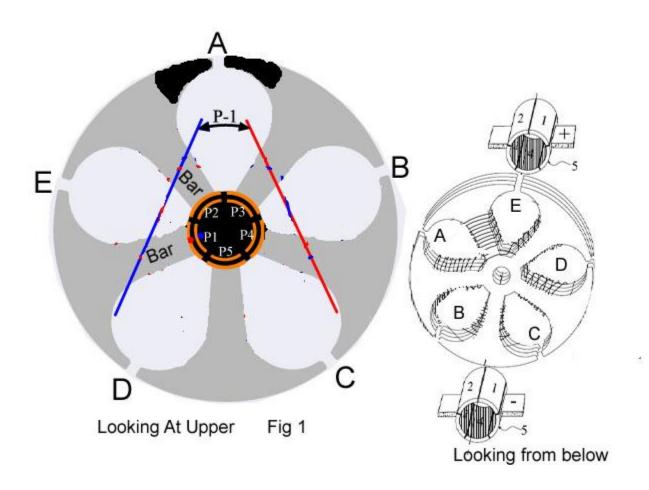
At the upper end, attach wire to upper commutator 5 tab.

Take wire down through Slot E and bring up through slot C, repeating for 25 turns. Then take wire down slot E and bring up through slot B, repeating 25 times. Take wire down slot E and attach wire to lower commutator 5 tab.

Job done!

#### UFO - Awesome stuff

I should add, as I'm a mere novice, I think there are a few tricks of the trade. The wire may appear to fill up the slot, but using a soft prod, like smooth plastic bar, the winding can be compressed in the slot, thus giving more space.



Check your windings NOT TO BE GROUNDED to the Metal Cores as you wind each Pair or Single Coils, use a Diode-Continuity Meter, from Commutator Element to Steel Core-Shaft, sometimes because of hard-tight pulls, you could crack the insulation then wire touches the metal, rubs the clear coat out and this shorts out the Coil...becoming useless...

Also check each Commutator Element between Start to End of each Individual Coil, making sure they are making solid

contact. Then check them between right next to it other Commutator Elements/Coils... they ARE NOT SUPPOSED TO BE IN CONTINUITY between them!!

<u>Learn How to check your Machine after is assembled</u>...for Coils/Pairs Open, just connect your continuity meter at Input terminals and rotate smoothly the shaft...you will be able to tell when brush meets the "in between commutator" spacing...it "hesitates" as then it goes solid (if Analog Meter needle will drop suddenly to zero...and return fast, and Digital Meters will drop to one (1.0) as infinite reading for nano seconds...check one by one, mark start point to complete the 360 degrees

round...We can not do this with Symmetric...they are always in short circuit...that is why they smoke as it shorts out...However, Asymmetric Motors could run with one or two faulty Coils (depending on total number of coils arrangement, but even the three poles could run with just Two Coils)...just like the Gas Engines could run without one or even two Cylinder firing( Eight Cylinder though, a four won't)...However, the Motor will stall at lower speeds and balance out at higher RPM's the same way...

Guess I expanded too much, sorry about that... 🙂

Hello to All,

Now before we have been just connecting Pairs to single elements of Commutators matching "perfect"...like Five(5) Pairs to Five (5) Commutator Elements top-below...Now, it could be done "Asymmetrically" also...

Like if We have a 12 Pole Armature...or a 10 Pole Armature...

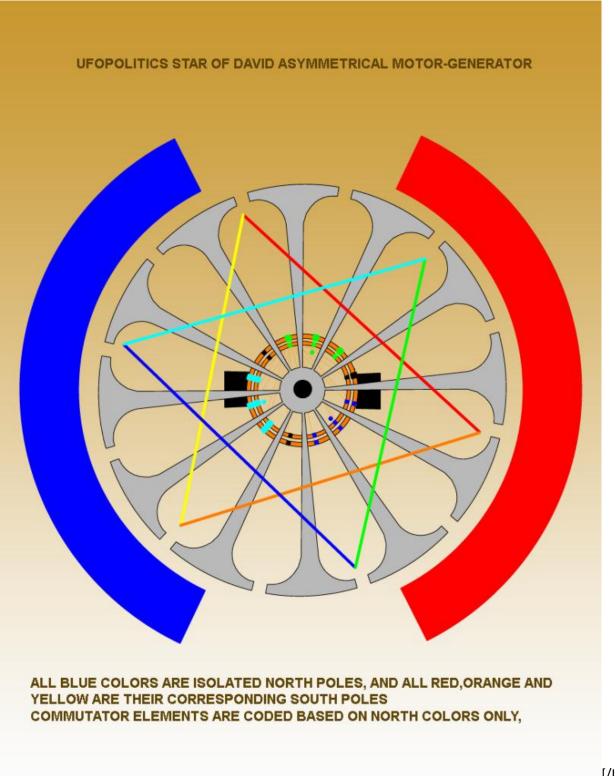
We could use in a 12 Pole Armature, a combination of what I call the "Sacred Geometry Design", where we wind three Pairs of Coils configuring a "Dual Delta Star" or a David Star...now, three Pairs of Coils will give Us exactly Six terminals (Two per Pair) for 12 X2 Commutator Elements...so, it shouldn't work right?

Well it does, We just have to "blend" commutator elements in groups of Three, (just wire them up through the hooks)...then we will get Three separated continuous elements per commutator...

This will need to do a bit of work right next to each separation of groups of three copper comm elements...open them a bit more the copper, to make space a bit wider by filing them spreading the segment spacing (to avoid heavy arcing, therefore damage to metal plates)

The same thing We could do with a 10 Pole Armature...using a Dual Pentagon Opposed, Design...using every two copper contacts joined at each commutator, and we have 5 Pairs of Coils.

This Motors have incredible torque, I mean great...but besides that, the times of Charging-Discharging are larger in time of being "On"(charging)...as also at Discharge times, that is why we most file the in-between commutator plates a bit wider. Otherwise they will discharge to next randomly closer element not in "Timing" to be done.

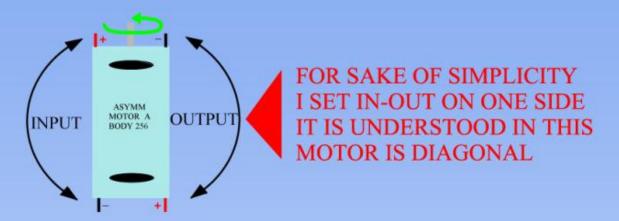


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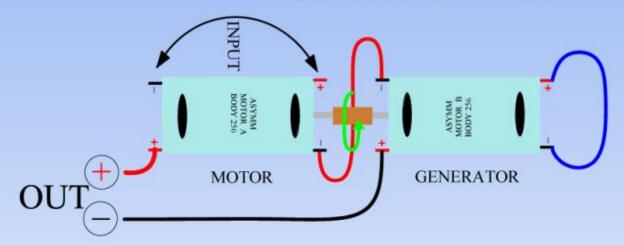
On this particular set-up,

Dark Blue (N) and Red (S) are Pair #1 (notice they are Parallel.) Aqua Blue (N) and Orange (S) Pair# 2 Green (N) and Yellow (S) Pair #3

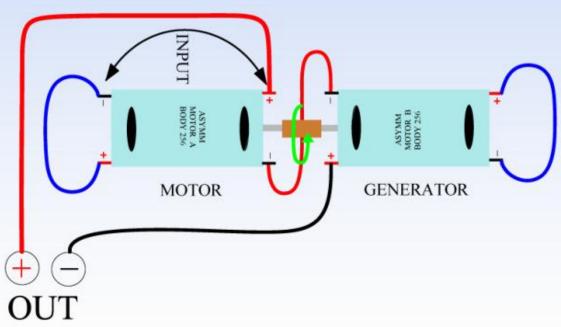
## DUAL FACE TO FACE CONNECTION MODES

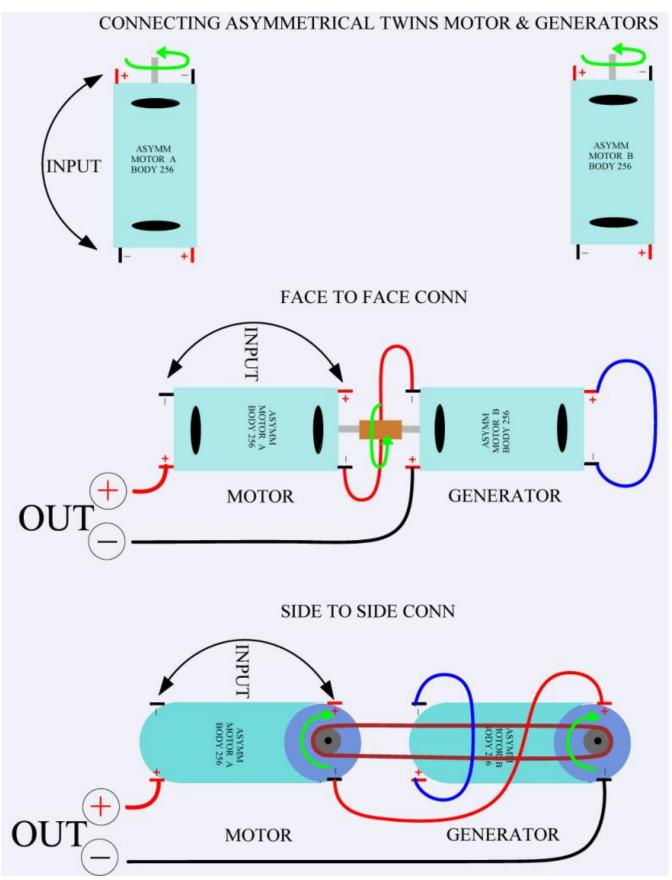


## FACE TO FACE CONNECTION MODE 1



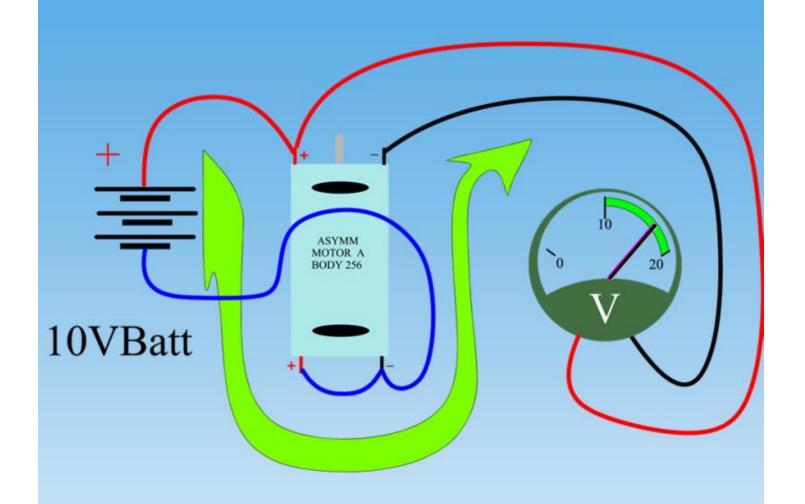
## FACE TO FACE CONNECTION MODE 2





A later experiment I have been doing...is to add 3.9 to 5.1 K Resistors between the opposite extreme from where we take the Armature power off...meaning, the side where we set the jumper cable from Negative Input to Positive Out, right there, I added between commutators those resistors...it increases the output voltage, from 5 to 10% depending on set up...

# CONNECTING ASYMMETRICAL SINGLE MOTOR SET UP TO READ EFFICIENCY TOTAL ARMATURE POWER (Ea)(RADIO SHACK MOTOR WITH DIAGONAL INPUT, 256 BODY)



Input (Ea)= 10Volts Ec(Not Negative NOW)=+ 8Volts Effective V (Ev)= Ea+Ec Ev=18.0V

COP=18/10 Volts=1.8

COP>1?!!

Witch: %\$^&\*\*\$#@(&)@#!!

Hello to ALL,

Ok Guys, let's get to work here!!...since it is so calmed now!!...



I seriously, still have a lot of work to Expose here...

### Asymmetrical Machines Angles of Interactions Exhibit One (I)

In the next posts I will be presenting a Couple of Diagrams, and I have chosen the Three Pole Design, just because of its simplicity, in order not to create confusion here, when rendering their angles of Interactions...

In Exhibit One I am just showing the "Motor Action" taking place, where the shaded in Red Area, I am defining the Input Brush sweep angle area that triggers Pole N1 (Green). It Occurs like a "Mirror Effect" in front, developing Angle Shaded in Blue, that defines the Magnetic Interaction taking place during the Red Sweep Area of Input Contact...

Now, this Blue shaded Magnetic Field area does not occur so "perfectly defined" like on Diagram when Motor is in Motion, it gets a little "Distorted, Blurry" because of Magnetic Drags and other Fields Effects from Magnetism as also from Electric Fields...

The Angles of Projection at Magnetic Interactions are completely defined Based ON Pole Positioning, and exactly defined by Angle Bisector, just like a Needle in an Analog Meter, always remember we are facing here a Fourth Dimension, which is Time versus Rotation/Translation... therefore, constantly changing Positioning...

However, roughly, and basically, that is the "average area of coverage" where they develop. So I will use it to explain them further.

Now based on this clear Design below...versus the One I have Rendered and Animated on My video "The Symmetry of Darkness" at Exactly Time 03:15.

I believe that Now, the people that had any "Confusion" as Where the Asymmetry or the Symmetry were?...could be more clear about where it was "Hidden"...

I will still tell you for those that have not seen it yet...

Symmetry Vs Asymmetry relates ONLY to their "Virtual Angles of Constant Magnetic Interactions"

That is EXACTLY, where this Mutilation to our Science has been hiding from All our Generations, dating back to more than One Hundred and Thirty Two Years...

Incredible..isn't it?

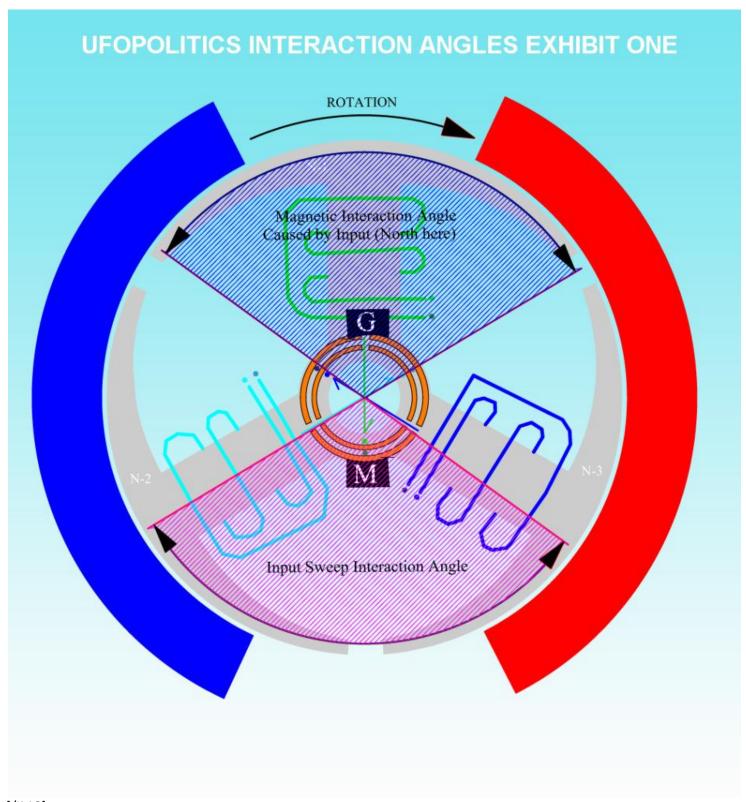
Well...We all know now where "The Big Secret" was...

If you guys have any questions, please, feel free to shut at me any time...

.....and I will see if I decide to answer or not to... (just kidding)

I always will as long as I still breath!!

[IMG]



[/IMG]

Don't get "too excited" that "You Understood Everything" very well and we are "all finished"...Nope...it gets more complicated in next post...

### Asymmetrical Machines Angles of Interactions Exhibit Two (II)

Now, here, we have the same Diagram as above, except, that I have added the Generator Degrees of Freedom in the shaded Green Area...

Now, it is important that you guys realize, the Rotation Sense noted by Top Arrow, to understand this better...

The way this Green Area "Sweeps", renders/displays its Definition, STARTS on EXACT point where Commutator Element being contacted/Energizing Coil...DEPARTS to NO CONTACT stage, or switch opened...

Then Coil travels FREE through Angle...Till This POINT where it reaches Generator Brushes, SECOND POINT of Contact...

Now, as you all have noticed, this Green shaded area, is "<u>overlapping</u>" both prior Motor Areas explained in Exhibit One (I), NOTE that now I have set the arrows defining the different angles with their RESPECTIVE COLORS...to be able to SEE their Amplitude Better...

However, <u>basically let's concentrate in the "Magnetic Field Areas" meaning Blue and Green</u>...and let me remind you...that the definition of Sweep Angles here, at Magnetic Interactions, is traced and **defined by the Angle Bisector (Line exactly at dead center of Angle, dividing it in two identical areas, therefore the Magnetic Field Center Axis).** 

Now, let me put it this way...The longer this Coil travels FREE, during its steady operation, the more Radiant Energy it will collect from the Vacuum, the Aether or the Radiant Field, however, you guys decide which name you will call it...

And here comes the "explanation" of this Radio Shack small Motor, rendering such a High Amperage...

Number one, *I have set a Third Generator Collecting Brush (Green "G" Brush)* at a further angle towards Input...Why?...Simple, to allow coil to travel longer distance, therefore more time to "collect" Radiant...The "Asymmetry" not only refers to Coils...but also to structure configurations, at trigger-collect, in order to obtain higher Machine Performance...

Now, let me explain what is happening inside little R/S Motor, related to High Amps readings...I did not wanted to "jump the gun" before, and start arguing about this...before slowly going over this, nicely with respective color diagrams...as I believe is the right way for you to understand this clearly, and not in the middle of screams and hectic environment.

Once that We "trigger" this Coils at Input...they start a "Chain Process" of collecting energy from the vacuum, they become like "little miniature pumps", sucking energy and storing the charges inside their tiny atomic structures in the Copper)...and they will not stop this process, unless there is a reversed current injected/applied to them...(like Symmetry does)...

Therefore if We "Collect" at exactly One Hundred and Eighty Degrees...from "trigger-input point"...to our Output...after they finish the Contact...they will keep traveling and pumping Energy In...for other 180 degrees, more or less...let's not be picky, or too precise here...

So, that energy that we all "missed to collect"...would be applied towards our Input Brushes on the other 180 degrees, and this happens "per coil"...rising our "Electron Flow Population" or also known as Amperage...but now...this is a completely "False Reading"...it is not a High Amperage "subtracted" from our Source Batteries...and the proof I have made it...like I have written before here...I had this Machines running for Hours on a single linear fed from a very small battery...for hours...so

imagine...if that Amperage Draw reading...would be for "REAL"...Battery would not have lasted for more than a few minutes...Understand so far?

Also the Voltage reading that we get at Input is False...it involves a Potential Difference from Generating Coils "mixed up"...

Also, that is the reason why, I said that this Machines will run better under controlled PWM...because we are slowly supplying the Input Source...and just "allowing" more time for machine to "digest/distribute" the charges...while at the same token...We will not be "fooling" our DVM's that much...

Now the best way to test this process, is to start measurements at really low RPM's...and We all , will see the difference there...

Now, when we set the Generator Brush at , let's say 30 degrees apart from Input like -more or less- I had laid out on Diagram...(Note Rotation Sense please, whenever we do this, we MUST consider rotation direction, it will NOT work set like this, if Machine changes direction, and will render the least of Energy output, this Applies to Vehicles/Crafts Motor Design, or higher percentage of a constant Directional Machine Operation...where we will choose this settings at the FORWARD Direction(Dough!!)...since we only use the reverse option for shorter periods...or never)

And -of course- We could always set another "Pair of Collecting Brushes" at the opposite side...as also applies excellent in Quad Brushed Systems...

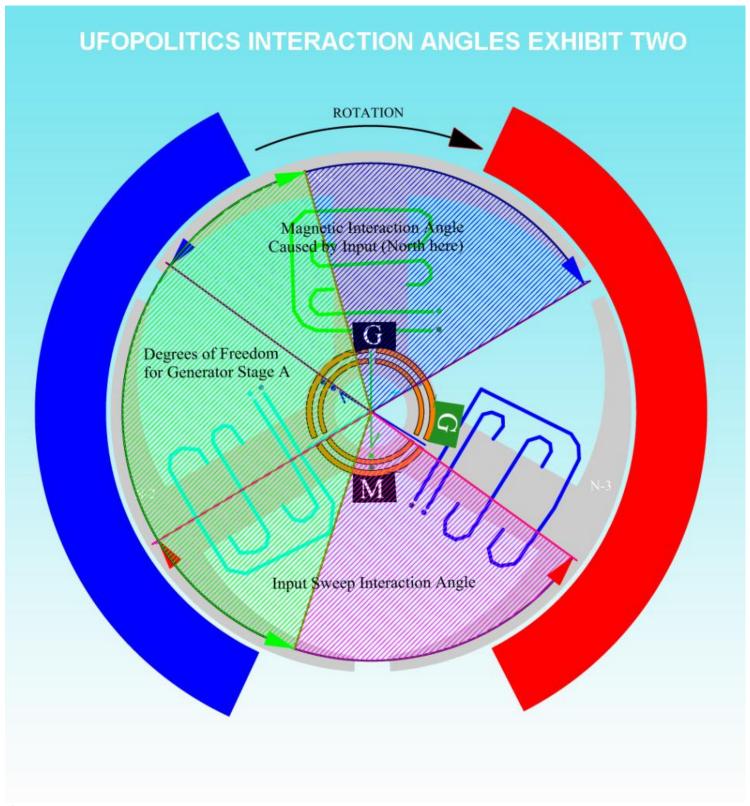
When Brush is set at 30 from Input...it will have much less time to recharge when hitting Input. contacts..it will be "almost empty" by our extraction at max capacity...

What I recommend for those with the skills...is not to just "figure out a random angle close to Input"...BUT make it "Adjustable" JUST the Generator Brushes...Then being able to decide at which point it renders greater output.

If We all move now to Electronically pulsating A Coil with a PWM...what We are doing here "Mechanically" by displacing Generator Brush closer to Input...is allowing Coil to travel a longer period on "OFF TIME" Pulse...just like I have been writing on my first Thread (My Motors Got me to Tap Radiant Energy)..to design, conceive in the Electronics Pulsations Concepts...to widen the Off Times...while shortening the On Times... Or reducing the Duty Cycle on our favor?...

		prend			

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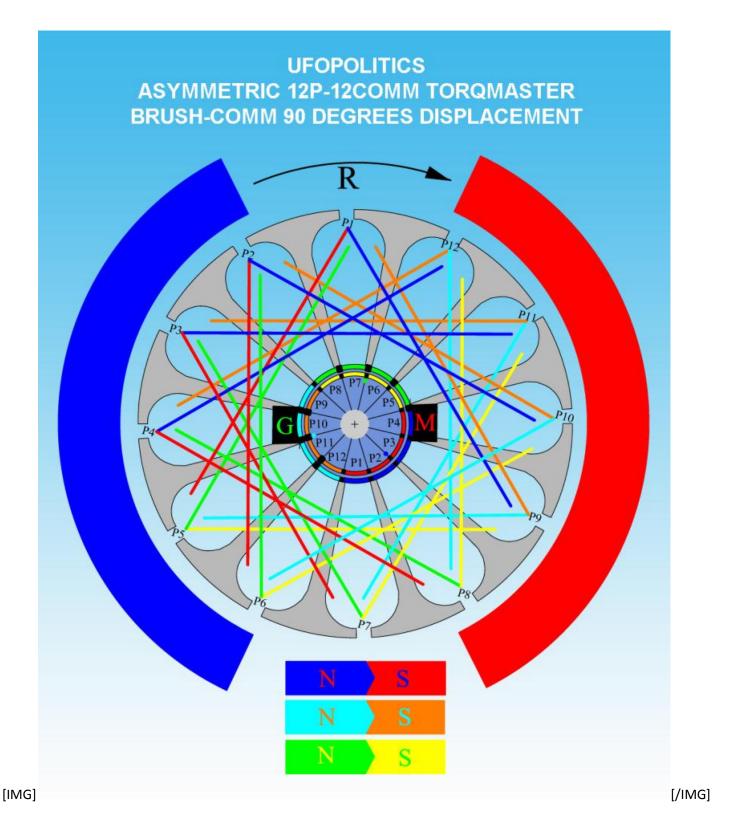
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I am empty...I have downloaded so much...my brain is completely dry...

But This IS VERY IMPORTANT INFO, I HAD TO UPLOAD...SO PLEASE, COPY IT, AND SAVE IT...AND SHARE IT!!

Hello to all,

Below is the same Configuration to last night's (well last morning)...but with a Ninety Degree Turn of both, Commutators and Brushes, since this Motors have the Brushes arranged this way (90 D to Stators), this will make it even easier to convert, I also has turned a bit more the Coils, to make them align better (if you notice) P1 Coils junction is completely in a 180 degrees to its respective commutator contact element P1, and so on.



Everything is "relative...meaning, we could turn this set up like I have done now...and all it takes is to run terminal Coil wires to the specified positioning of contact element at Commutator...

It would have been a lot of trouble to turn those brushes physically within the Casing...

Now, this motors are \$40-50 USD, some Hobby Shops have them for like \$37.00(Model 180)...and like Dad Hav said, the 90

models are cheaper and could be found even cheaper...but the 90 is shorter, and then you will DO have to cut and weld steel frame to elongate it...plus pretty short shaft enough to "barely" insert a Pulley or a Dyno Wheel...

Therefore, I HIGHLY recommend the 180 as the Main embodiment to mount everything to. it would be a much easier conversion, plenty of shaft and smooth operation...pls trust me.

I expect to be finished tonight late...or tomorrow noon winding it...still working on Fiber Wound Stator CAD Spec's...

Hello Dad Hav,

The Draw back of Brushless when applying Asymmetry...is to keep those coils independently energized, while having a "Positioning Sensor" to trigger the right Set of Pairs at the right positioning relative to Stators (and Stators in most BLDC are typically "Rotating Stators"...Then We are bounded to use "Remote Directional Switching" electronics to do this job...either Hall Sensor Effect Transistors, reed switches, or Infra Red Emitter-Receivers... So We end up kind of complicating more the whole "Scenario Here" related to Replications...

That is the reason why I have been so far dedicated to work on Mechanical Commutation Systems...

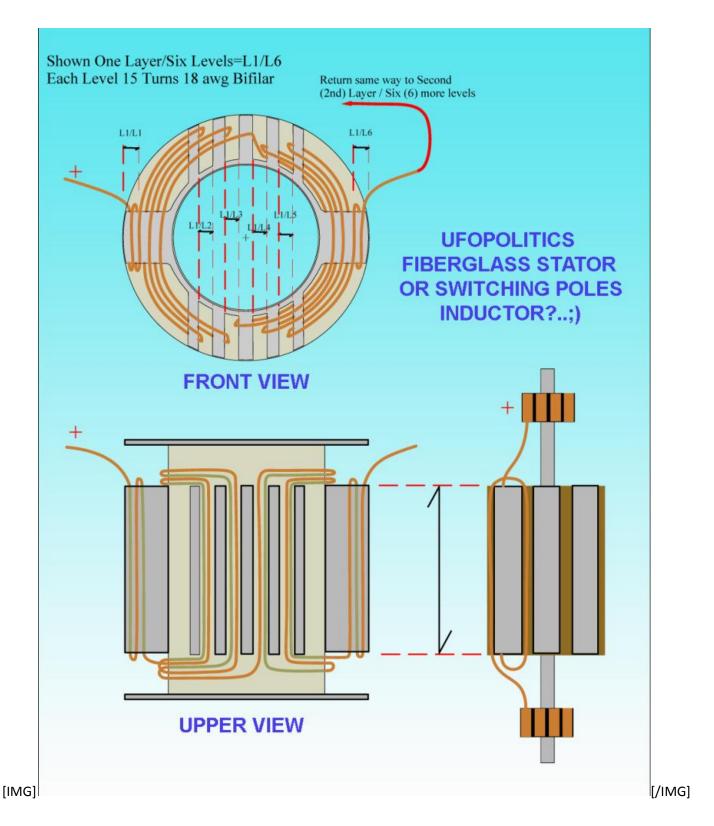
I see the limitations as to have a Machine that will only work on Permanent Magnets concepts, as a Draw back when expanding to bigger sizes...besides strong Magnetic Friction between Steel-Magnets...

Honestly up to now...the Commutator Systems, including the Universal Motors used in most Tools, and "Heavy Duty Work" like Hydraulic Pumps, Lifting Motors, and heavy torque requirement fields ...have not being able to be replaced by the BLDC Systems...because they will never deliver the required torque as Brush-Comm does.

Could you show those "BLDC Parallel Wound Printer Motors"...in pic's or videos?, I have no idea what they look like...

Hello My Dear Friends!!

Well, like I promised here is the Fiberglass Asymmetrical Stator CAD...



Now for sake of simplicity I just rendered One Single Layer of wire, but I used Two Layers(2) total in Real Model, it should read @1.0 Ohms

It was made of Bifilar 18 awg wire (Two Strands in Parallel)

The way to wind it is just like making a straight Cylindrical Coil...therefore returning at end going Layer 2/ Level 6 /15 Turns, then Level 5 /15 T, Level4/15 T...so on, till ending right at starting Terminal.

The length of Fins (Holding Horizontal Winds) to be as close as possible to Machine Armature Body length. <u>I also rendered the Machine Armature to make sure to wire ALL Pairs of Coils in exactly same direction as Stator has been wound!!</u>

In Upper View I am showing the "underneath" wires in a Khaki Color, different as the seen Brown color . I did it , in order to show you must keep levels within same corresponding fins...

I will be releasing an Animated 3D CAD Video where a little Purple Light (just like Radiant Plasma) will show you the wire path...

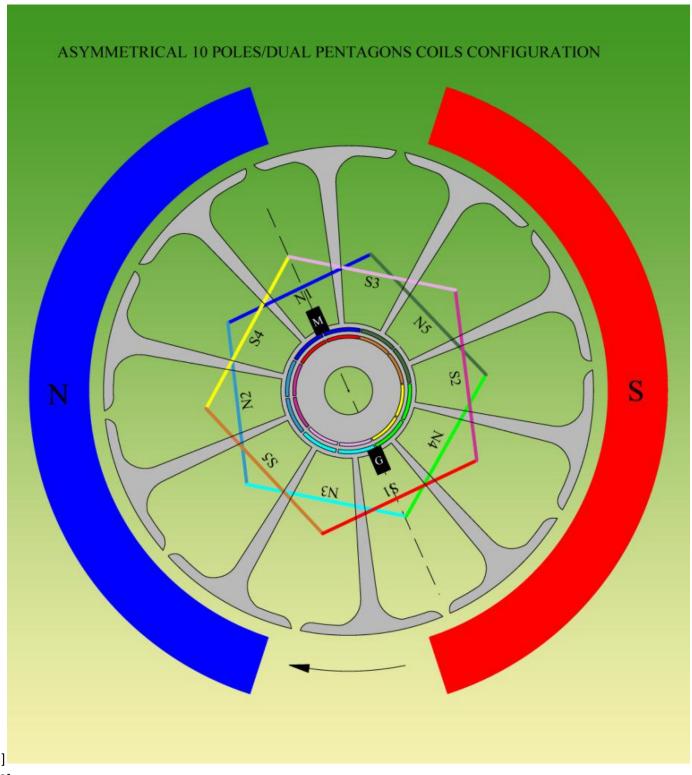
So SHE will show you the way...

Here is the Asymmetrical Dual Pentagons, this Motor fits all 10 and divisible of 5 Armatures...like 20 Poles with Quad Pentagons.

This Motors at 10 Poles shown here, have incredible torque with very low voltages, however due to short *Throw Out Angles* by just Two Poles Coils, they do not deliver High Speeds.

They are great for lifting applications where heavy force is required, like Hydraulic Pumps, Robotic Servos and Mechanical Driven Mechanisms, like Automotive windows regulators.

In the 20 Poles Structure, is understood it could be arranged for speed also, by winding Four Poles per Coil, magnifying its "Take Off/Throw Out Angles" at Magnetic Interactions. Or could be dedicated to even more Torque, than the 10 Poles here, by adding Four Pentagons at Two Poles instead.



[IMG] [/IMG]

I have built this type in several configurations, that ranges from Hydraulic Pumps to the <u>Sullivan Gas R/C Starters</u>...They are more expensive than the Chinese, but worth it, they are American Made, and very well built  $\bigcirc$ ...not like the TorqMaster, they come in several Models, High to Low prices...Higher is the Dyna-Tron Model, then I got the cheaper one for parts...

Now there is one particular issue here, their shaft is thicker front, finer in rear...so there are Mod's to be done there, The easy way out is by using the Cap from front of other Motor then adapting the great Brass bushings casing/Mica boards that will

have to be press into the Aluminum Housing pre fab built in rivets, that will fit great...

The Outer Frame does have to be Lathe-Cut - Mig Welded to Extrude it...is heavy steel Tubing. Or You guys could just use matching Aluminum Tubing Spec's (ID) and cut to size...

Brushes are set at around 30 Degrees from Stators ending opposed corners...But I made some grooves to be able to adjust them...

That is the Motor on this Video:

### TEST TWO, OPPOSED PENTAGON WIRING DESIGN, SULLIVAN MOTORS - YouTube

The Heavy Torque is "delivered" entirely by Radiant (C)... (Can't EVER Copyright HER...SHE is Free Now!!)

If You notice in Diagram, while N1(Blue)-S1(Red) are at Input being Energized, N3 (Cyan)-S3(Rose) and also N4(Green)-S4(Yellow) are completely assisting Rotation(Remember Radiant Flows Opposite, therefore Magnetic Poles are reversed from Diagram...IF they will not reverse...Motor will NEVER turn half mm.. (3)...so, it is actually Two Pairs acting from Radiant, while we just "spent" a small energy activating One Pair...

### Quote:

### Originally Posted by **prochiro 2**

Great and Thanks. I was thinking, Not that there is any problem with your setup, but just thinking that if one would make a longer rotor then that would make more torque, up to a point, where higher ohms in coil would defeat the benifit. Is this correct and if so does anyone know of a general working formula for diameter and length. I was looking at starter motors and the only thing I could see that was different between the low end and the high end was the rotor length.????? So if that is true and your setup works well, we could then increase torque by just a longer rotor.

Dana

Hello Prochiro,

Absolutely right!...the LONGER the Armature Cylinder...not only the heavier the Torque...but, the MORE ENERGY they will produce at Output...Faraday, 1800's..."Is just the wire that cuts the Magnetic Field Lines at Perpendicular Angle, (the vertical ones along the armature length) the ones that actually generate current..."

In My arrangement, since it is based on same Laws...applies exactly same way...That is a "Universal Electromagnetic Law"...that applies whether Symmetrical or Asymmetrical Systems...

Now, torque is a "direct" consequence of Electromagnetic Fields Interactions...Interactions Forces given by the amount (Density and Potential) of currents flowing in Coils...gathered by Induction of the "specific" Vertical Elongated wires...Perpendicular to Magnetic Fields...

Where this wires are "Directly Proportional" to any calculation of Torque and Output...Now here, forget about the

Witch Counter Effect "Deduction"...is dead a long time ago...

The same exact way applies to My Pulsed Stator design...the more number of this "Parallel to Armature Axis Wires" we consider in Design...the more we will collect at output...and the more Torque Machine will render.

### Quote:

Originally Posted by pmazz850 D

@ufo,

When you wind this stator and you get over to L6, do you wind 30 turns, one set of 15 for first layer and one set of 15 turns for second layer?

Also you said its bifilar, so when done winding, just connect end of one coil to start of other (traditional bifilar)? Thanks.

Regards.

Hello Pmazz, Ok...

### Quote:

When you wind this stator and you get over to L6, do you wind 30 turns, one set of 15 for first layer and one set of 15 turns for second layer?

Absolutely, Yes, that is correct...at Layer1/Level6, just as you do a straight Coil in layers, it is like starting "from bottom up now", so yes L1/L6 goes a 30 total turns, then continue on Level 5 another 15 (You already did the previous 15)...then L4 another 15, and so on...

Now, the section of fins...that you crossed at Layer (1)one, to make the "bypass" to other side...this time when making bypass do it in another next section, not in the same one you used...just to balance out winds and not create a bulky wiring there...also to "balance magnetic fields" ...understand?

### Quote:

Also you said its bifilar, so when done winding, just connect end of one coil to start of other (traditional bifilar)?

NOPE!!...It is a "PARALLEL BIFILAR", NOT a Tesla Series Bifilar like in his patent...it will definitively "cancel magnetic fields to exactly nada, zero..."

So, what it is...is just a Dual strands of 18 wire, attached at both starting-finish ends (parallel)...but the "thing is"...to hold the wires together when winding them...not allowing them to spread apart, keep'em together all time during turns...

What this Type of winding does ...is Increase the Magnetic Field strength to Double of what a single strand does, while lowering resistance in half or more...

I also got very good news for your "All Plastic Motor"...

It will run on just a straight feed from batteries...just connecting Input Brushes to Stator terminals in Parallel...As it also works in series...but then it adds the Coils resistance to the Machine...going slower...

Now, the Advantage of Pulsing both, Stator and Armature Input...is that you just add a "couple of Diodes"...blocking Hot from getting through...at both parallel connections to machine...and get a lot of extra energy after diodes

connection (see my previous Thread)...to light up some CFL's or do whatever...charge batteries...or Cap charge...and still have extra energy out...not counting the Machine -Armature Output...this is just from Input...

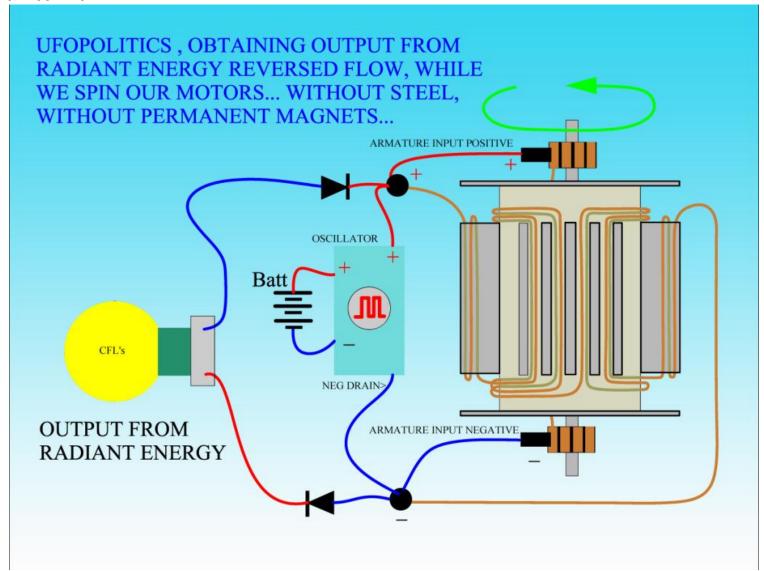
This is the way I hooked up a stationary Coil back a few months ago...

Now, I am bringing the same Coil...but as an Stator rotating an Armature, and producing -through Diodes- an Output flow of Radiant Energy Excess...or Cold Electricity...

I have used a simple 555 timer oscillator in Astable Mode, an LM317 Voltage Regulator, with just two caps, two resistors...and a Bank of Five N-Channel MOSFET's (NTE 2397) doing the Battery Bank (36V LiPo Pack) ultra fast switching at Negative Drain ...The Diodes are based on NTE 576 or UF505 (for not US market guys), which are Ultra-fast rectifiers rated 400V/150A.

All details of Diagrams on my other Thread, as there you will find also, even better oscillators than my Old 555 arrangement...

### [IMG] [/IMG]



Now, This Machine will definitively turn by just a Battery Source Linear Feed...However, No Output from Radiant will come out at all...no Light... 

3

Also please Realize, that I have NOT even shown here the Machine Armature Output Brushes, nor Terminals or connections...This is "just" output from RE Reversed Back Flow...rectified by Two Diodes from our Input...

Regards to All

Quote:

## Originally Posted by **Hiwater D**

UFO--- On the diagram of the 10 pole dual pentagon motor. Are the windings wound with rotation or one set wound ccw (the first set on the bottom) and the top set of windings wound clockwise around the armature.

Also it shows the brushes touching two commutator sections each. Does that mean that each single wind is connected to 2 commutator sections each. Other wise which if singley connected which brush is to be used. looking at the diagram of the m brush is it the left or right side.

I did wind one armature today. Took three tries to get to run. Lots of torgue but it does over heat on me. Had to center the brushes at the center of the magnets. I also had to wind the bottom windings against rotation and the other set with rotation. Then I could get to run.

Reason i asked the question about the brushes is because I think the timing is off. Forgive my ignorance, but im going to keep working on it to make it better. thanks hiwater.

Hello Hiwater.

This Motor is NOT SUPPOSE TO HEAT AT ALL!!

So, definitively something wrong there...I run them with 36 Volts, 6-10 Amps.

In All My Diagrams Coils are "COLOR CODED" in order to define their Magnetic Polarity Projecting towards Stators.

I always use ALL Blues derivatives shades, including Green as NORTH.

All Red Derivatives Shades are SOUTH, Including Yellow, Brown, Orange, etc...

Besides I also Number them by N1-S1 (Pair-1)/(P1)...

Now all Commutator Segments are also Color or Number Coded, matching their corresponding Pair.

Upper Commutator is the wider Diameter at Diagram (Based on looking from Top View...Perspective makes first look bigger)

Smaller Diameter is the lower Commutator.

Quote:

Also it shows the brushes touching two commutator sections each. Does that mean that each single wind is connected to 2 commutator sections each.

Yes, in this Motor, Commutator Elements are joined by each two. (Two Blues, two red, ...etc) So run your wire through two elements hooks, above and the linear matching element below.

Sorry, but I do not understand your term "Upper and Lower Coils"?...In this Motor as all mines...all coils are set at same longitude related to poles... no upper or lower...all at same height...

Ok, I will try to explain the start ...

Blue-Red is My First Pair of SERIES Connected Coils (All Pairs in My Systems are always connected in Series between them), N1-S1,Ending Terminals (2) are connected to TWO Commutator Elements ABOVE and TWO to LOWER Commutator, marked Blue-Red, On Diagram there is ONLY ONE BRUSH painted...other one right below (not seen), but touching Inner-or lower Commutator RED Segments-Elements. Therefore when Coils are energized they are supposed to project N-S towards Stators, according to Blue-Red on Coils.

After You have Pair N1-S1 Wound, Set and Connected...is much easier to keep going...to N2-S2, All Coils Following First Pair, are wound and Connected IDENTICALLY AS FIRST ONES, Starting with UPPER COMM TWO elements right next to Blue was (Medium Blue)...and ending at next to RED at Lower Comm (S2-Dark Rose color)...(In this Diagram You will be winding "Backwards" from starting point N1-S1.

Let me know if this helped you.

Brush size...really depends on the design...

Some of My Motors I join collectors-elements together, like the Pentagons, there, the Brush size could be the size of two elements...

In Small Motor applications, like your incredible Five Poles...it could be just the exact size of element...or collector, it runs better...

However, in must of my designs it do not make any problems if brush is bigger than one Collector...Not getting too big though, as to reach three elements...

Higher RPM's are only achieved by increasing the "Throw Out Angles" of Interactions between Stators-Armature Activating Coils, per segments of Coils-Poles, the more Poles you comprehend within your Machine Structured Coils...the higher the speed...the lower the torque...as it also works the other way around...

If you wind One Coil per Pole, 1 coil to 1 pole...let's just say...in a 12 pole machine...it will go slower than a stepper motor, running at Half quarter of a square wave...or like the Hour needle of a slow watch...VERY SLOW!

If You wind out of that same 12 Pole Armature...with just TWO COILS, comprehending exactly SIX POLES EACH, therefore dividing that rotor in two...that Motor will go super fast...just because you have right there a "Throw Out Angle" of 180º...PER COIL...

While in the One(1)Coil per(X) One (1) Pole...You will have a Throw Out Angle of exactly 30º...

I hope you understand me now... 🙃